

We claim:

1 A chip for functional genomics for DNA testing and which holds DNA samples comprising, in combination:

a silicon base,

5 an oxide layer on the base, and

a hydrophobic fluorene polymer coating on said oxide layer,

said coating having openings therethrough down to said oxide layer for holding DNA samples.

10 2. The chips of claim 1 wherein said coating is substantially 100 Å.

3. The chip of claim 1 wherein said openings in said coating have been formed using a positive photoresist.

15 4. The method of forming a chip from a silicon substrate for holding DNA samples comprising the steps of:

forming an oxide layer on the substrate,

forming a hydrophobic fluorene polymer coating on said substrate, and

20 etching away said coating down to said oxide layer in spaced apart positions to hold separate samples.

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process.

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